

**IN THE CLAIMS:**

Amend the claims as follows.

Claims 1-14. (Canceled)

15. (New) An isolated and purified HIV-1 mutant GP120 envelope glycoprotein comprising an amino acid mutation in position 112, according to the amino acid numbering of Kwong et al, Nature, Vol. 393, 18 June 1998, said mutation in position 112 consisting of replacement of W with S or I or F.

16. (New) The mutant of claim 15 further comprising at least one mutation of S at position 338 or position 427 for W or F at position 96 for W.

17. (New) An isolated and purified HIV-1 mutant GP120 envelope glycoprotein comprising an amino acid mutation in position 427 or position 338, according to the amino acid numbering of Kwong et al, Nature, Vol. 393, 18 June 1998, said mutation consisting of replacement of W with S.

18. (New) A method of vaccinating an individual comprising administering a mutant of claim 15 to an individual.

19. (New) A method of vaccinating an individual comprising administering a mutant of claim 16 to an individual.

20. (New) A method of vaccinating an individual comprising administering a mutant of claim 17 to an individual.